



## Air Force Modeling & Simulation

# DMO



### DISTRIBUTED MISSION OPERATIONS FACT SHEET

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Air Force Agency for Modeling and Simulation

► **Distributed Mission Operations** is an integration initiative to link live, virtual and constructive (real-world weapon systems, human-in-the-loop, and computer driven simulations, also known as LVC) simulations to **provide a seamless environment for warfighter training**, mission rehearsal and decision support to operations.

► As an integration effort, **DMO primarily leverages existing and emerging programs and technologies**. It provides wartime operations support using battlespaces that mirror those anticipated in combat. Additionally, DMO supports testing and evaluation, standards evolution, experimentation, and range integration.

► **DMO is the Air Force piece of the Joint National Training Capability, one of the cornerstones of the Department of Defense's Training Transformation**. In today's environment, almost no real world options are done solely by one service, but are done in a Joint environment with Joint resources and people. DMO is no exception. DMO capabilities from the Navy have included such weapon systems and missions as AEGIS class destroyers, EP-3 aircraft, Virtual At Sea Trainer, Anti-Air Warfare and Surface Warfare coordinators for the 7th Fleet East Carrier Group. The Army has brought Air Defense Artillery, PATRIOT battalions, Common Ground Stations, and Aviation Tactics and Evaluation Group into DMO. Joint activities have included the Joint Operations and Urban Synthetic Terrain program. Air Force-level participation in DMO includes Predators and Global Hawks to F-15s, F-16s, B-1s, Special Ops AC-130Us and A-10s. It also covers the Space Warfare Center, AF Information Warfare Center and the Cyber Warfare Integration Network as well as Rivet Joint and Cobra Ball.

► **Currently, the primary vehicle for advancing DMO is the Virtual Flag series of exercises**. The hub for battlespace integration of the geographically separated LVC assets is the 705th Exercise Control Squadron's Distributed Mission

Operations Center at Kirtland AFB, N.M. DMOC is the premier research and training Modeling and Simulation facility for developers and warfighters. DMOC provides the immersive combat synthetic battlespace that models 19 different C2ISR/weapon systems and the supporting theater level comm links. Virtual Flag will be held with Blue Flag for the first time in January. In April, Virtual Flag will combine with Red Flag, Army Roving Sands, Navy Battle Group Inport Exercises, Marine Corps CAX and the Joint Service Training Exercise for the first ever Joint Red Flag LVC exercise.

► **Some DMO challenges include standards, networks and Multi-level Security**. Standards are needed to help tie the large number of simulators, simulations and weapon systems together for meaningful training and mission rehearsal, as well as lower level standards for databases. Challenges in networks include bandwidth, accreditation, cost and availability. As the need to include all Services, government departments and coalition forces to train together increases, the reality of varying levels of security access increases. MLS is needed to minimize the problems this causes.

► **DMO provides the major component of Training Transformation by maintaining combat readiness at home or deployed by allowing warfighters to train combat skills on a daily basis at the individual, team and inter-team levels**. DMO allows the warfighters and decision-makers to say "we've been here before," "we've fought more difficult enemies before," and "we anticipated their every move."

